



Economic Commission for Africa (ECA)

THE AFRICAN DEVELOPMENT FORUM '99

POST ADF SUMMIT



Information and Communication Technology Policies and Strategies

1 Introduction

The majority of African countries are experiencing socio-economic challenges characterized by low growth rates, balance of payment difficulties, the consequences of weak industrial bases and poor infrastructure, heavy international debt burdens and problems associated with huge public and social expenditure. The region is still marked by conflicts and the widespread social and physical disruption they entail. These problems could be compounded by the new challenges posed by globalisation and the information age, or steps could be taken to embrace policies aimed at exploiting the new information and communication technologies (ICTs) to craft inclusive and representative solutions.

ICT policies and strategies – at the national, sub-regional and regional levels – are important tools to define Africa's response to the challenge of globalisation and to nurture the emergence of an African information society. This is especially relevant given the rapidly growing international focus on ICTs and development spelled out in the next section.

Information society programmes will not solve Africa's problems, but they can contribute to the improved delivery of basic services such as health and education, significant new business opportunities and more open political processes. They can thus enable an informed and empowered population and better understanding by the rest of the world of the diversity of African experience.

The recommendations contained in this document encompass integrated and iterative actions at the national, sub-regional and regional levels. They are based on the assumption that the best signposts to an African response to the challenges of the global information age will emerge through:

- The creation of the building blocks necessary to facilitate national information and communication technology policy development;
- Sub-regional and regional integration; and
- Regional cooperation to influence international decision making on issues related to information and communication technologies in Africa.

2 Global Focus on ICT and Development

During 2000, with great fanfare major international bodies launched potentially highly significant initiatives to apply ICT to the needs of the developing countries.

- Under the auspices of The United Nations Economic and Social Council (ECOSOC) a high-level panel of information technology experts from Africa, Asia, Eastern Europe, Latin America and

elsewhere met in April 2000¹. They called upon the United Nations to play a leadership and catalytic role in helping to bridge the digital divide and accelerate development by harnessing the development potential of information and communication technologies (ICT). To this end, the panel recommended bringing together key stakeholders in an international ICT Task Force and creating an associated Trust Fund.

- In a Ministerial declaration in July, ECOSOC adopted the high-level group's recommendations and recognised the key role of partnerships among national governments, bilateral and multilateral development agencies, the private sector and other relevant stakeholders in putting ICT in the service of development.
- The September United Nations Millennium Summit endorsed the ECOSOC Ministerial Declaration and in November the Secretary-General appointed José Maria Figueres, former President of Costa Rica, to chair an Advisory Group to shape the ICT Task Force. The Task Force would administer a Trust Fund to be established and funded on the basis of voluntary contributions by interested partners. Its mission would be
 - To provide overall leadership in helping to formulate strategies for ICT development and putting them at the service of development for all,
 - To forge a strategic partnership between the United Nations system, private industry and financing trusts and foundations, donors, programme countries and other relevant stakeholders, and
 - To mobilize new resources for ICT for development
 - The Task Force
- The UN Millennium Summit also announced four new initiatives, three of which were ICT related:
 - A volunteer corps, called the United Nations Information Technology Service ('UNITeS'), to train groups in developing countries in the uses and opportunities of the Internet and information technology.
 - A Health InterNetwork, to establish 10,000 on-line sites in hospitals and clinics in developing countries to provide access to up-to-date medical information.

¹ The ECA submitted a formal report on "The ECA and Promotion of Information Technology for Development" to ECOSOC to assist in this initiative.

- A disaster response initiative, "First on the Ground", which will provide mobile and satellite telephones as well as microwave links for humanitarian relief workers in areas affected by natural disasters and emergencies.
- In a related development, at their meeting in Okinawa in July 2000, the G8 group of industrialised nations adopted the Okinawa Charter on the Global Information Society and resolved to set up a Digital Opportunities Task Force (Dot Force). The Dot Force would be asked to come up with findings and recommendations on global action to bridge the international information and knowledge divide and report back at the next G8 meeting in 2001.

Permeating the statements and resolutions from these agencies are several key areas that must be addressed to alleviate poverty and improve the quality of life in developing countries: health, education, SMMEs, the environment, and governance.

3 The Changing Policy Environment in Africa

When ECA launched the African Information Society Initiative in 1996 the main constraint to African information society development was the lack of infrastructure to support communication and access to information within countries. Since that time connectivity has arrived in all African capital cities and now many secondary towns as well. Information society issues have emerged in all regions as a major public policy concern. The key policy challenges for Africa now are:

- Extending access;
- Applying the technologies to solve development problems;
- Collaborating to build market size and exploit economies of scale; and
- Articulating an African vision in international negotiation on information society issues.

The policy process must:

- Involve broad groups of stakeholders including representatives of user communities and civil society;
- Identify issues that can best be addressed beyond national borders; and
- Recognize the need for a stronger African voice in global negotiation.

The recommendations included in this document target the key steps that can be taken at the national, sub-regional and regional levels to build Africa's capacity to grasp opportunities inherent in the information age and strengthen its voice in global decision-making bodies.

4 Action Proposals

4.1 National Policy

Under the auspices of ECA's African Information Society Initiative (AISI), twenty-two African countries are formulating national ICT policies². While no two countries are the same and there can be no single policy formula, it is nevertheless possible to define in broad terms key issues that fall within the scope of national information and communication policies and strategies. The following forms the basis of the ECA model to guide the development of national ICT policies, strategies and infrastructure plans in African countries:

- Creation of the necessary **enabling environment to facilitate the deployment, utilisation and exploitation of ICTs** within the economy and society (e.g. through the implementation of special tax packages, instruments and incentive programmes; the facilitation of an investment climate for the mobilisation of financial and technological resources, removal of existing regulatory and bureaucratic barriers, etc.);
- Development of a **local ICT industry** to facilitate the production, manufacturing, development, delivery and distribution of ICT products and services (e.g. through support for R&D);
- Development of the **national human resource capacity** to meet the changing demands of the economy (e.g. through ICT training and education in schools, colleges and universities);
- Development of the **national information and communications infrastructure**;
- Development of the **legal, institutional and regulatory framework and structures** required for supporting the deployment, utilisation and the development of ICTs (e.g. national ICT structures and bodies; legislation around e-commerce, Intellectual Property Rights, data protection, security and freedom of access to information etc.);
- Development and promotion of the necessary **standards, practices and guidelines**;
- Development of **sectoral projects addressing national socio-economic development priorities** (e.g. development of ICTs to support the operations of the civil and public services; development of ICT initiatives in sectors such as health and education);
- Engagement of **government as a model user of ICTs** – to provide an example and encourage the expansion of local markets;

² Countries that have not yet initiated information policy processes should approach ECA for support within the framework of the African Information Society Initiative.

- Fostering **the application of ICTs in the private sector** to improve the efficiency and effectiveness of businesses both large and small, and especially supporting electronic commerce.
- Development of mechanisms to ensure the **participation of women in the formulation of ICT policies** and ensure that such policies address the specific developmental needs of women.

In particular the recommendations of the "African Telecommunication Policy and Regulatory Framework Development Programme [African Connection Group, 1998] approved by the Africa Ministers of Communication, indicate desirable outcomes of the policy process in the area of telecommunications infrastructure:

- Separation of the Government regulator and operator;
- Establishment of independent regulatory institutions;
- Universal service and access to basic and value added telecommunications services;
- An investor friendly telecommunications environment;
- A competitive local communications industry;
- Private investment in the ICT sector;
- Co-ordinated spectrum management and frequency planning.

The proposals described below will help countries to extend universal access, meet basic developmental needs, further appropriate use of ICT for governance and commercial purposes, build public understanding of information society issues and strengthen negotiating capacity in international fora. Their adoption and implementation will go far to making the Information Society a reality in Africa.

4.1.1 Rural Access Task Force on ICT Innovation

Africa's entry into the information age will demand rapid extension of access to ICTs. To reach out to, and benefit, the majority of the population a special effort must be made in rural areas where many of the most disadvantaged and remote communities are.

Policy initiatives need to be put in place to push access out into rural and disadvantaged sections of the population. It is possible to 'kick-start' national actions in this area by focusing on critical areas where rapid progress is possible – a kind of 'advance-party' to check out the terrain ahead and chart the speediest route to the destination. A Rural Access Task Force on ICT Innovation, with broad stakeholder participation, can pursue innovative projects in the following four areas:

- *Financing Mechanisms*, by providing: micro-finance for community-based ICT micro-enterprises; local call tariffs for dialup Internet access from anywhere in the country (as is done already in 15 countries in Africa); subsidised broadband connectivity costs for education and health institutions (such as through the proposed Global Service Trust Fund (Annex); and tax-breaks for companies making computer donations to public institutions.
- *Technology Solutions*, by: building on existing technology such as community radio stations linked to the Internet to extend the reach of community voices; deploying low-cost ICT solutions to provide access among rural populations; supporting the spread of top quality low cost open-source software such as Linux; and using transport, wireless and electricity networks for connectivity.
- *Institutional Innovation*, by supporting local community built and owned networks and telecentres as in the telecommunication operator cooperatives being established in Eastern Europe and Asia.
- *Regulatory Innovation*, through relaxing existing regulation and piloting new mechanisms, including, for instance, reducing the high license fees for ISPs and telecom operators as has been done in many countries, and allowing ISPs to install their own wireless data links (excluding voice traffic) as has been done in Mozambique, Ghana and Uganda.

The Task Force, assembling experts from government, the private sector, the research community and civil society, would focus on the definition and implementation of realistic and replicable pilot projects to extend access to rural areas. This approach would allow all concerned to test the benefits of changes to the regulatory framework and existing procedures in an experimental environment without prejudice to existing policy. Projects could be funded on an individual basis (both the private sector and the development community could be interested by specific experiments) or through a special fund drawn from licensing obligations or other sources.

4.1.2 National Forum for Co-operation between Civil Society and Government in Global ICT Governance

Recent events in Seattle and Washington have shown that constituencies from all regions of the world are intent on making WTO and other multi-lateral organizations more responsive both to civil society and to the needs of less developed countries. If African countries are to benefit from this movement as well as the major UN and G8 initiatives mentioned above, there needs to be more effective collaboration within government and between governments and civil society on globalisation and information society issues.

A national forum, for effective communication and cooperation between different departments of government, civil society, NGOs and the private sector in areas of mutual concern could initiate:

- Press briefings and research on appropriate national responses to issues coming up for decision in multilateral fora: for example, accounting rates, intellectual property and software licensing;
- Research into the national implications of specific issues;
- Targeted external expertise and assistance;
- Seminars and workshops that would expand public understanding.

Even in countries where high level skills are available to governments to formulate positions in relation to multi-lateral organizations, their impact is often compromised through poor co-ordination and communications between different ministries that are involved, for instance Ministries of Trade, Information Technology, Telecommunications, Broadcasting, Science and Technology, and Culture.

A national forum coupled with interdepartmental groups on each major negotiation issue (Accounting Rates, Spectrum Allocation, Intellectual Property Rights, GATS) could lead on the one hand to more informed public opinion and deeper political understanding of the issues at stake and, on the other, to more effective negotiation and better use of scarce skills³.

5. Sub-regional and regional policy issues

ICTs can improve the prospects for better regional integration by:

- Bringing down the barriers to personal communications - national boundaries, culture, physical disabilities, mobility, distance, geography, and time zone;
- Reducing the costs of international communications between countries;
- Fostering cross-border information and data exchange and sharing;
- Tightly linking the decision makers in the region;
- Offering new means for the region to develop its own identity and global presence.

³ A specific example of such a forum is the National Information Technology Forum (NITF) in South Africa. Its constitution requires equal representation from government, the private sector, labour, academia and community organisations. It continues to play a useful role in bringing those constituencies together to debate information society issues. See www.sn.apc.org/nitf

Conversely, regional and sub-regional collaboration on selected information society issues can stimulate the extension of communications infrastructure, encourage the sharing of information, experience and resources in applications areas and stimulate the development of markets of sufficient size to justify investment in local ICT industries and electronic businesses. SADC and COMESA have both begun the development of sub-regional ICT strategies.

There are a number of issues that, if addressed from sub-regional or regional rather than national perspectives, could help maximise the benefits of national information policy initiatives.

- **Joint procurement**

Joint procurement procedures in the areas of telecommunication and communication products and services from major international suppliers and communications service providers will enable countries to emphasize their needs as a block and realise bulk discounts.

- **Compatible standards**

Adoption of mutually compatible standards for key regulatory documentation and systems will enable investors to expand more rapidly into the markets of neighbouring countries. It will also facilitate exchange of information and connectivity between various systems.

- **Common tariffs**

Establishment of common strategies on reducing tariffs and transit charges on telecommunication services and implementing roaming agreements on mobile networks will facilitate cross boundary communication and will enable access to and sharing of information. Also there should be regional agreements on mechanisms for accounting settlements.

- **Spectrum management**

Co-ordinated spectrum management and frequency planning and allocation at the sub-regional, and ultimately regional, level would facilitate the allocation of existing capacity to high priority areas.

- **African backbone**

Traffic routed outside the continent is expensive to users. Regional backbones – as proposed by the African Connection - will enable countries to communicate directly and reduce charges paid currently to North America and Europe. Sub regional communication backbones would facilitate connection between countries of the region and effective exchange of network information between African Internet Service Providers (ISPs) and at the same time put in place building blocks of an African network.

- **Research and Analysis**

There is a dearth of research and analysis in the region to support policy and decision-making on information society issues including the relationship between access to ICTs and economic growth, telecommunications, convergence of technologies, decentralisation of government services, e-commerce, public-private partnerships, industrial competitiveness, industry growth, harmonisation of standards, human resources development and regional and international trade.

There is a long-term need to build capacity to address such issues and provide targeted advice to decision-makers.

Action at the sub-regional – and consequently regional - level is constrained by a number of factors including lack of expertise in the sub-regional economic organisations, the overlapping responsibilities of the regional economic integration organisations and the reluctance of governments to give up sovereignty on some of the issues concerned. There can be little doubt that the economic integration organisations need to build competence by bringing information and communication policy expertise into their own organisations.

The following are proposals for immediate actions that can be taken at the sub-regional and regional levels.

5.1 Community of National Regulators in Africa

Regulation in the telecommunications and broadcasting sectors is relatively new in Africa. Regulators, whether autonomous or under direct ministry control, have little experience in ICT regulation, and need capacity building. Some assistance has been given, for instance through the ITU and the bilateral programmes of a number of countries in the North. However, advice must respond to the unique environment of Africa, building up the knowledge of different models and strategies applicable to African conditions; the extent to which external inputs can be taken as models is limited. It will be important to build on existing skills in Africa, for instance in the training area, rather than relying on imported expertise.

The proposed Community of Regulators will facilitate the process of improving national regulation for universal access, and enhance African capacity to regulate in the regional, as well as the national, interest. The network will specifically provide a framework to:

- Gather experience and best practice from Africa and elsewhere on universal access regulation;
- Develop and share accountable, transparent and inclusive systems of regulation, with specific focus on the inclusion of civil society and NGOs;
- Develop a set of indicators on progress in the evaluation of regulatory structures that meet national priorities; and
- Provide specific, targeted, capacity building where it is needed.

The Community of National Regulators will be supported by a:

5.2 Regional Task Force Initiative to provide policy, legal and regulatory advice

Within the African Information Society Initiative, ECA, with support from interested partners in the Partnership for Information and Communication Technologies in Africa (PICTA) and from the African Connection, will establish an African Task Force of experts and practitioners to study and advise African governments on how the development and the exploitation of ICTs in their economies and societies can be supported and facilitated by the necessary legal provisions and legislation as well as the required regulatory framework and provisions. Among other things, this Task Force will consider legal issues relating to Intellectual Property Rights, Privacy, Data Protection and Security, Freedom of Access to Information, and other cyber-laws. It will also formulate specific action plans, programmes and initiatives to collectively address regulation issues of sub-regional and regional nature as well as tackle issues and problems relating to traffic, transit and tariffs and the creation of harmonized spectrum management plans.

The proposed Task Force, apart from its advisory role to enhance national ICT efforts and initiatives, will also play a key role in identifying and facilitating co-operation and collaboration between African governments on matters relating to legal, institutional and regulatory issues that will require joint action or common stands by African governments in global negotiations.

5.3 Policy research on market integration

Policy research on the issues identified below could yield short-term benefits through the integration of markets at the sub-regional level and are early candidates for inclusion in the Task Force agenda. Other issues will emerge from the interactions initiated through the Community of Regulators and the Regional Information Society Exchange Network.

- **Joint ICT product and services procurement**

According to RASCOM, poor procurement policies not only jeopardize economies of scale but also lead to duplication of effort, waste of limited resources and provide a test ground for unproven technology. Mechanisms to encourage sub-regional/regional cooperation in this area have a number of price and quality of service benefits.

Cooperative arrangements in the area of joint procurement of telecommunication and communication products and services from major international suppliers and communications service and bandwidth providers operating on a sub-regional or on a

regional basis will enable participating countries to benefit from economies of scale, quantity discounts and collective negotiating power. Sub-regional cooperation could also facilitate technology-know-how acquisition, deployment and exploitation to support national efforts towards rapid ICT-driven socio-economic development and growth. Joint procurement programmes, coupled with focused HRD policies, could contribute significantly to expanding the potential of local manufacturing capacity.

- ***Creation of harmonized system for clearing payments, financial auditing and arbitration in accounting settlements***

Sub-regional economic groupings and cooperation initiatives could be implemented within the framework of the sub-regional economic blocks in collaboration with regional telecommunication organizations and service providers as well as international telecommunication organizations and bandwidth providers in order to exchange information on tariffs, business strategies and the interface between national and regional network development. Sub-regional solidarity could strengthen Africa's hand in negotiating for lower bandwidth costs (for example through support to the Global Service Trust Fund for Tele-education and Tele-Health described in Annex) and lead to cost sharing of links to the emerging African fibre backbone.

- ***Reduction and harmonisation of tariffs on computer and communications equipment***

The reduction of taxes on computers and related products and services would send a signal that governments are ready to promote their country's entry into the information society, encourage imports that facilitate the local assembly of computers and reduce import costs for public and private sectors and the development community.

The regulator's network and the task force will be complemented by a broader network for information exchange on information society issues which will attempt to involve all interested organisations within countries and across borders to generate a vital African debate on what the information society means to individual communities, countries and to the region as a whole. ECA will manage this network.

5.4 Regional Information Society Exchange Network

There is a need to share information broadly on best practices and national experiences on the formulation and implementation of national information and communication policies, strategies and plans. AISI provides a suitable framework that could be operationalised at both the subregional and regional level.

Subregional level co-operation in this area could be initiated, coordinated and facilitated by sub-regional economic blocks, namely ECOWAS, COMESA, SADC, CEMAC, UEMOA, EAC, etc.

- The regional network will be made up of government agencies, civil society, media, private sector organizations, NGOs, and international organizations – all organisations and national networks interested and involved in the national ICT policy and plan formulation and implementation to facilitate the sharing of information on best practices and national experiences.
- It will encourage national groupings and organizations involved in the national information and communications policy and implementation to share their experiences and best practices with their counterparts in other countries of the region.
- ECA will document best practices and national experiences in areas identified by the network for distribution on a region-wide or targeted basis.

The objective of this package of four proposals to strengthen sub-regional and regional integration and co-operation is to initiate and sustain debate in Africa on all aspects – social, economic and technical - of the information society, to stimulate appropriate policy research and analysis and to improve support to decision-makers. The building of the networks or communities will be an iterative process beginning in some cases sub-regionally and in others through the links among practitioners and organisations across the region.

6. Africa's Participation in Global Fora

Many decisions that impact on the African continent in the area of ICTs are taken in distant capitals and in global institutions. This is not new, but globalisation is amplifying its significance. At the same time, the institutions and relations are evolving and realigning. For Africa this could mean even more external control and constrained sovereignty. But the state of flux also offers an opportunity for Africa to stake a reasonable claim within the institutions and to develop new and more effective relations within and outside the region. As an example, in December 1996, cooperation among a group of thirty African countries resulted in the defeat of a joint USA/EU proposal to revise the Berne Convention on Copyright (Article 7). Had it succeeded, all material downloaded from the Internet (or from any computer) would have been subject to copyright, even for own use. The decision was achieved through an alliance with others, including some Asian countries, civil society organisations and industry sectors and through developing and persevering with a single coherent position on the issue.

Often, the obstacles to effective influence derive from the structure and nature of the institutions involved, such as the WTO, IMF, and World Bank and the capacity to influence outcomes is limited. However, there are also many

opportunities forgone unnecessarily, in these institutions as well as in the more democratic UN family of ITU, UNCTAD, WIPO, UNESCO, etc.

The strategic imbalances and the immediate tactical shortcomings must be addressed in actions aiming at ensuring that international outcomes are more equitable

The challenges facing Africa in achieving an effective voice are enormous. Amongst them are:

- The limited bargaining power and leverage of African countries as compared to other countries and regional blocs;
- The absence of coherent, consistent African positions on major global issues, that do not just react to events but anticipate issues well in advance of their explicit emergence;
- The lack of experience and capacity in this area, and the 'brain-drain' of many of the most qualified;
- The absence of effective cooperation amongst African countries.

To fully address these challenges will take time, and demand long-term strategic action and coalition building. There is no shortcut to eliminating the imbalance in power relations in all multi-lateral organizations. But some aspects can be tackled in the short or medium term. Action in all cases, however, must begin now.

The following examples give some indication of the diversity and range of fora and issues at stake for Africa.

- ***Influencing the shape of the future Accounting Rate Regime.***

The accounting rate regime is the system by which telecommunication operators pay each other for the use of their telecommunication networks to complete calls. The historical system developed in the ITU has come under increasing pressure and the USA has proposed a solution that would greatly reduce revenue flows to many African countries. The only effective remedy in this situation is around collaboration – in Africa and across developing regions - not simply in relation to the ITU proposal, but in relation to how other international fora, such as the WTO, can be used to influence the outcome.

- ***Intellectual Property Rights versus Genuine Compulsory Licensing (GCL) in Software***

The current main regime of Intellectual Property Rights, in the form of patents and copyrights, is a major component of ICT costs especially in software and content. The current move in the WTO with TRIPS (Trade Related Intellectual Property Rights) represents a further tightening of the use of information for development. Relatively speaking, the structures in place and being

negotiated represent an excessive burden on non-software and content producing regions, and put a brake on development in certain domains.

One solution, currently implemented in other areas, might be collaboration on promoting, in international fora, the concept of Genuine Compulsory Licensing (GCL), an internationally recognized mechanism for improving widespread access to commercial software and copyrighted or patented goods and content. GCL is an agreement under which the copyright or patent holder is replaced as the deciding agent on levels of royalties paid by a government agency issuing a license for use of material. The royalty rate is fixed by law, which compels the local licensee to pay the rate to the patent or copyright holder. This system is already in use in many countries for pharmaceuticals and books, to make them affordable to ordinary people.

- ***The WTO/GATS Agreement of Telecommunication and Universal Service***

The WTO concluded an agreement in 1997 allowing foreign investment in basic telecommunications networks. Only a few African countries have as yet signed up, but there remain serious doubts regarding whether the agreement might be interpreted in the future to impose restrictions on universal service. Universal services policies must, according to the agreement, be administered in a competitively neutral manner so that they are "not more burdensome than necessary" for the kind of universal service defined by member States. The phrase has yet to be interpreted; a narrow interpretation could restrict the scope of universal service policies. This issue is likely to emerge again as more African countries sign up and the implications run deeper into the sector. The risk is that African countries will be constrained in the policies they can pursue in the context of liberalization to ensure that rural areas and social services can get the subsidies and support required.

- ***Africa's Participation in ICANN (the Internet Corporation for Assigned Names and Numbers) and Internet Governance***

Of critical current relevance is the governance of the Internet. Until recently it has been handled by the US government and its subcontractors such as NSI or IANA, but since 1998 has been progressively handed over to ICANN. ICANN now handles the responsibility of the co-ordination of the Internet infrastructure, made up of numbers (IP), names (domains) and standards (e.g., http - hyper text transfer protocol). Resolution of such issues has great future implications for Africa's capacity to use the Internet effectively and cheaply.

Africa remains seriously under-represented in the various ICANN committees, but recent events are helping to strengthen the continent's voice. An African (Dr. Nii Quaynor from Ghana) has been selected as new ICANN board member in the ICANN meeting which took place from 13 to 16 November, 2000 in Marina del Rey, California. Other African members now sit on ICANN bodies such as the Interim Coordinating Committee (ICC) of the ICANN Members Group, the Civil Society Internet Forum, and the Names Council.

African governments have not, however, as yet taken up existing places allotted for example on the Governmental Advisory Committee (GAC) of ICANN. Several African countries attended the recent international ICANN meeting, including Senegal, Niger, Ghana, Burkina Faso, Togo, Nigeria, Benin, Kenya, Uganda, Angola, South Africa, Mauritius and Gambia. There it was agreed in the African caucus meetings, to create an 'AfrICANN' organisation to act as an African ICANN group. A key aim for Africa must be to continue to improve representations both on ICANN and the Internet Society (ISOC). African regional and subregional groupings (ECA etc) will also require representation.

The international community and the private sector should support the newly established African Network Information Centre (AfriNIC). AfriNIC aims at:

- Allocating and registering Internet resources in the African region;
- Assisting the African community in the development of procedures, mechanisms, and standards to efficiently allocate Internet resources; and
- Developing public policies and positions in the interest of Africa.

6.1 Proposals for Action

Action in several areas can help build African positions on these issues. The needs are to:

- Develop detailed and well-researched African positions in relation to the major issues of the day, that reflect the specific needs of Africa; issues of immediate priority have been identified above;
- Enhance the understanding of the general public, including civil society, NGOs and the African private sector, and raise the profile and urgency of the issues;
- Build a broader alliance at national level, with government, NGOs, and African private sector, to support positions where common ground exists;
- Galvanise governments in their efforts to address the global issues.

The following proposal addresses these issues. It would add one component to the network package proposed for sub-regional and regional action, outlined in Section 5, to support the emergence of an African community of practice on critical issues of global governance.

African Community of Practice on ICT Global Governance

African countries are often criticized for not cooperating more effectively in multi-lateral arenas. However, an important part of the problem is the absence of specific African perspectives on the broad issues that are addressed. Such perspectives, if

developed, can be diverse and even competing but they would be based on the African experience and needs, rather than (as is currently the case) on external observations of what Africa needs.

At the same time, the African media and public in general remain relatively uninformed of the global information society issues, and are therefore unable to provide support to the process.

The Community of Practice would encompass:

- A network through which Africans can develop distinctly African perspectives on global issues that relate to ICTs, building up 'communities of interest and practice' that can articulate well developed and coherent positions for Africa to pursue, and nurturing trust and cooperation among African policy makers and indeed with civil society.
- Channels through which these perspectives can be disseminated amongst African society in general, through building a bridge to the mass media, especially radio, and journalists.

Within the broader network outlined above, the community will make full use of Web based and Internet technology to develop and deliver the materials and tools that will enable African countries both to build up their capacities and to collaborate more effectively. This would include:

- Monitoring developments in Global fora, e.g. WTO, ITU, WIPO, World Bank, OECD, G8, EC, etc.
- Impact analysis and projections, in African economies but also society and culture, of these global trends in relation to Africa, based on indicators and quantitative and qualitative information;
- Updated information on key current issues;
- Succinct position papers on key issues, written by domain experts with an LDC perspective, outlining the strategic issues for Africa, and proposing alternative systems and approaches to global governance, and anticipating on medium-term and long-term issues likely to emerge;
- Mechanisms for training and capacity building;
- Press briefings, and direct links to mass media to ensure they are fully apprised of key global issues and of possible African concerns and positions.

7 Specific Sectoral Initiatives

As mentioned in section 2, a global consensus is developing that if ICTs are to yield fundamental benefits for poverty alleviation and economic growth in the developing world, certain sectors demand priority attention for ICT support. They include: youth and education, health, public governance and the SMME (small, medium and micro enterprise) sector. Those are indeed the sectors targeted by the other initiatives in the ECA submissions to ECOSOC and are the subject of detailed reports to be submitted to the Post ADF Summit along with this one.

- The Youth and Education Report, entitled **The African Learning Network: Emerging from Behind the Knowledge Curtain**, notes that without profound changes to Africa's education and learning systems, within a few years there will be no next generation of leadership to guide African institutions in the global information society; African intellectuals will be active mainly in the universities and corporations of the North and of other developing regions; African children, male and female, will have little or no access to global knowledge and no capacity to exploit that knowledge or generate and defend their own and community livelihoods; and the brain flood from Africa will make the current brain drain appear a trickle. It proposes three major programmes of action: SchoolNet Africa, VarsityNet and OOSYNet (Out-of-School Youth Network). Collectively those programmes promise a learning network that connects the continent and links it to the rest of the world, greatly accelerating and enhancing the learning process.
- The **Information and Communication Technology for the Health Sector** report paints a dire picture of a continent ravaged by HIV/AIDS, malaria, tuberculosis and rising infant mortality. But it also shows how ICTs can make a major contribution to containing the grim escalation in disease and death by targeting: Improvement in Primary Health Care, Transferring Diagnostic Information to Specialised Centres (i.e., telemedicine), Improving the Effectiveness of Health services, Medical Education and Research, and Deploying ICTs in the Fight Against AIDS.
- **Electronic Commerce in Africa** describes the global revolution in the conduct of business, and government interactions with business and the individual citizen. It identifies specific product and service niches (especially tele-services) and markets (especially the African Diaspora) and shows how the SMME sector in particular can go about exploiting those opportunities.

There are many obstacles to progress in all of these sectors that can be overcome via the recommendations in this document. It is essential therefore that those stakeholders be engaged in the ICT policy processes proposed in this report.

8 Summary of proposals

This document is based on the assumption that documenting and sharing African experience emerging in all sectors of society will provide the surest path to African responses to the challenges of globalisation and the information age. It identifies critical information society issues for Africa as well as key sectoral opportunities. The document proposes an interlocking set of recommendations to deal with them.

These mechanisms will not all be put in place at the same time or cover the same geographic space. But over time they can lead to a body of knowledge and practice that will inform information and communications technology policy and practice in the region, increase global understanding of Africa's position and strengthen its voice in world bodies addressing information society issues.

- **At the national level**, *initiate the policy process within the framework of African Information Society Initiative and establish:*
 - **A Rural Access Task Force on ICT Innovation** *to test experimental approaches to the extension of networks to rural, under-served areas*
 - **A National Forum for Co-operation between Civil Society and Government in Global ICT Governance**, *to promote informed public debate and effective negotiation*
- **At sub-regional and regional levels**, *maximise the benefit of national policy initiatives and build African capacity through:*
 - **A Community of National Regulators in Africa**, *to build capacity and define models appropriate for Africa*
 - **Policy research on market integration**, *to identify ways and means to realize subregional and regional integration*
 - **A Regional Information Society Exchange Network**, *to share national experiences and best practices*
 - **A Regional Task Force to provide policy, legal and regulatory advice**, *to advise African governments on exploiting ICTs for development*
- **At global level**, *influence global decision making on ICT issues through:*
 - **An African Community of Practice on ICT Global Governance**, *to make Africa's participation in global fora more effective*

9 Costs, funding and implementation

The costs of developing and implementing national information policies will depend on the specific situation of each country. ECA, through AISI, can provide expertise to initiate the process leading to detailed plans and budgets. The two specific proposals for national action draw mainly on existing resources and capacity and can probably be implemented upon adoption without external assistance.

A meeting of national regulators is envisaged for the end of August to consider plans to initiate the Community of National Regulators.

Detailed proposals will be developed for the Community of Practice on ICT Global Governance.

ECA – through AISI - will take the lead to develop plans and initiate implementation of:

- The Regional Task Force to provide policy, legal and regulatory advice;
- The Regional Information Society Exchange Network which will interact with the Communities of practice of National Regulators and on ICT Governance identified above and give life to others.

Annex: Global Service Trust Fund (GSTF)

The GSTF Initiative has been launched by the Clarke Institute of Telecommunications in Washington following discussion at a number of international meetings.

Objectives

Education and healthcare are basic needs, fundamental for human development. The main goal of the proposed GSTF is to expand educational opportunities and improve health in developing countries by enabling these countries to:

- Make full use of electronic distance education and telemedicine.
- Participate actively and fully in data-intensive and media-intensive exchanges with both developed countries and other developing countries.
- Participate interactively and fully in joint research, professional development, and knowledge-building activities with institutions and organizations in other countries.

To do this, a Coalition of interested organizations would further develop the GSTF proposal to establish a multi-donor funding mechanism, the GSTF itself, which would:

- Reduce the cost of broadband connectivity to a level poor countries can afford.
- Create policy and regulatory frameworks conducive to the development of sustainable distance education and telemedicine programs.
- Establish high-quality applications in sufficient developing country sites to demonstrate technical feasibility, increase demand, and build support for more extensive use of such technologies in developing country contexts.

Next Steps: Recommendations of the Working Group

Establishing the Fund and Coalition requires a critical mass of global support. The ability to mobilize financial and in-kind resources for the Fund depends on the credibility of the membership of the Coalition. That credibility would be furthered by early support from such key international entities as commercial satellite and fiber optic service providers, multi-national businesses, national governmental aid agencies, foundations, and agencies of the United Nations such as the ITU, UNESCO, WHO, the World Bank Group (including the International Finance Corporation), and the regional development banks (African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, and the Inter-American Development Bank). No legitimate agency of standing would be excluded from participating.

Creation of a preliminary coalition of participants to support the sourcing of bandwidth and financial resources would be critical to the initial testing of this concept.

To that end, the working group recommends that:

1. A more polished and developed draft of the proposal be put before major international conferences in 2001 and 2002.
2. An intensive effort be made to enlist the support of the leadership of the key international institutions mentioned above, facilitating the mobilization of bilateral aid agencies, foundations, and multinational corporations.
3. Working groups on telecommunications policy conditionality, education policy conditionality, healthcare policy conditionality, and operational aspects of the Fund and the Coalition be convened respectively by ITU, UNESCO, WHO, and the World Bank. These working groups would include representatives of other interested international organizations, bilateral aid agencies, companies, foundations, and other NGOs, as well as of relevant information and telecommunications industry organizations, e.g. the Global Information Infrastructure Commission.

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